

Patent Claims

1. A jacket tube made of synthetically produced quartz glass as a semi-finished product for producing an outer cladding glass layer of an optical fiber, characterized in that the quartz glass has a content of metastable OH groups of less than 0.05 wt ppm and a content of anneal-stable OH groups of at least 0.05 wt ppm.

2. The jacket tube according to claim 1, characterized in that the quartz glass has a content of metastable OH groups of less than 0.01 wt ppm.

3. The jacket tube according to claim 1 or 2, characterized in that the quartz glass has a content of anneal-stable OH groups of not more than 5 wt ppm.

4. The jacket tube according to claim 3, characterized in that the quartz glass has a content of anneal-stable OH groups of not more than 1 wt ppm.

5. The jacket tube according to claim 3, characterized in that the quartz glass has a content of anneal-stable OH groups of not more than 0.5 wt ppm.

6. The jacket tube according to any one of claims 1 to 5, characterized in that the quartz glass has a content of anneal-stable OH groups of at least 0.1 wt ppm.

7. The jacket tube according to claim 6, characterized in that the quartz glass has a content of anneal-stable OH groups of at least 0.3 wt ppm.

8. The jacket tube according to any one of claims 1 to 7, characterized in that it has a ratio of outer diameter to inner diameter in the range between 2 and 8, preferably between 4 and 6.

9. An optical fiber comprising a core having a diameter d_K and a first cladding region cladding the core and having an outer diameter d_M , and a second cladding region cladding the first cladding region, the ratio of d_M/d_K being at least 2.5, characterized in that the second cladding region consists of synthetic quartz glass
5 obtained by elongation of a jacket tube according to any one of claims 1 to 8.